THE STANDARDS FORUM

June 2002
Volume 10, Issue 1

Your publication for news about the DOE Technical Standards Program

Inside this issue:

Have a safe summer season!

How the DOE Technical Standards Program Supports DOE's Integrated Safety Management System

By Rick Serbu, DOE Technical Standards Program Manager

DOE Technical Standards Managers (TSMs) have recommended that we make more direct efforts to show how the DOE Technical Standards Program (TSP) serves as a key element for implementing DOE's Integrated Safety Management System (ISMS). Since a major DOE ISMS Conference is underway at Los Alamos National Laboratory (LANL) as I am preparing this, I judge this would be a good time to address this matter. In skimming the agendas for the ISMS meetings, I think this article will supplement an area that will not see much discussion but has much practical application. I hope to address the six ISMS components [i.e., (1) ***objective***, (2) ***guiding principles***, (3) ***core functions***, (4) ***mechanisms***, (5) ***responsibilities***, and (6) ***implementation***] and show how the DOE TSP provides infrastructure and activities that support ISMS. I have selected certain elements of these components (usually denoted with quotes) and followed them with the supporting TSP functions and activities. I hope to build on these concepts and will readily accept any inputs on how the DOE TSP supports ISMS – so please call or e-mail me with your ideas!

(1) The ***Objective*** of ISMS is to "integrate safety into management and work practices at all levels." Here's how the TSP supports this integration:

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Reaffirmation of DOE Technical Standards: What is the Proper Process?

Several Preparing Activities are choosing the "Reaffirmation with Errata" maintenance option for DOE Technical Standards as a result of the five-year "Sunset Review." The DOE Technical Standards Program Procedures (TSPPs) outline this maintenance option, but several questions have been raised as this option is starting to be used.

DOE-TSPP-9 states that "Reaffirmation Notices with Errata indicate that the Preparing Activity has performed a five-year review of a DOE Technical Standard . . . Involved are a modest number of superficial purely administrative changes. Qualifying administrative changes would include a change in organization designation code like a transfer of Preparing Activity, non-technical reference changes such as a renumbered DOE order, or purely editorial changes." The standard is technically valid in its present form, but minor editorial changes were made (i.e., reference number changes due to the references being updated but with non-technical changes to the reference).

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How the DOE TSP Supports . . . (Continued from page 1)

- DOE Technical Standards cover performance-based or design-specific technical specifications and related management systems practices. They span classification of components; delineation of procedures; specification of materials, products, performance, design, or operations; and definitions of terms or measurements of quality and quantity in describing materials, products, systems, services, or practices. These standards (nearly 200!) are used to support safety analyses, standards/requirements identification documents, work smart standards sets, and other safety basis documents. The standards also serve as the basis for specific procedures at the working level and establish DOE safety and risk levels (e.g., for nuclear criticality and fire protection) in common with industry best practices. DOE standards provide guidance on linking policy to work performance (e.g., Procedures Standards, Work Smart Standards Handbook).

"The DOE TSP provides the procedures and infrastructure for DOE organizations to develop needed DOE-unique technical standards where no voluntary consensus standards (VCSs) are available or suitable."

- The DOE TSP provides the procedures and infrastructure for DOE organizations to develop needed DOE-unique technical standards where no voluntary consensus standards (VCSs) are available or suitable. Many of the 1,025 different standards now used by DOE and its contractors under ISMS systems are VCSs developed by Standards Development Organizations (SDOs) with extensive involvement from DOE individuals and from over 26 DOE Topical Committees chartered by the TSP to coordinate with SDOs. The DOE TSP also compiles and lists DOE participation with SDOs, tracking more than 675 individuals participating with over 68 SDOs on 1,385 separate committees and working groups that directly support DOE missions and functions. This broad participation helps develop standards that DOE can use, provides cross-fertilization of ideas, and helps DOE to establish interoperability and common terminology with other Federal agencies, SDOs, and industry.
- DOE Technical Standards are non-mandatory and can be used in part or in whole to support DOE missions and functions, consistent with safety basis documents.

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Reaffirmation of DOE Technical . . . (Continued from page 1)

Procedure

Reaffirmation with errata documents are announced in the *Standards Actions* newsletter and by e-mail notice from the Technical Standards Program Office (TSPO) to the Technical Standards Managers (TSMs). These standards have a 60-day comment period to allow the DOE community an opportunity to recommend whether the document is acceptable for reaffirmation with the cited errata.

The Preparing Activity must include an errata table (similar to a Change Notice table) with the reaffirmation proposal. The errata table should list the changes/updates that have been made to the Technical Standard.

The documents proposed for reaffirmation with errata will then be posted on the TSP Web Site under the "What's New" section. In addition, the TSPO will issue a second TSM e-mail notice that will include (as an attachment) a copy of the errata table and affected pages. Preparing Activities should note that the words "draft" and "revision" should not be used on the reaffirmation with errata documents so reviewers do not think the document is being revised. A text box (similar to that listed on a draft standard) is to be placed on the cover to indicate the pending action.

Printing and Posting of Reaffirmation with Errata Documents

The cover of DOE Technical Standards reaffirmed with errata will be updated to include the reaffirmation date. Only the pages affected by the errata will be reprinted. These pages will be sent to all libraries. The affected pages will be replaced in the PDF file of the DOE Technical Standard that is posted on the TSP Web Site, and the errata table will be added. In cases where the document has been reformatted (i.e., sections are renumbered, fonts are changed, etc.), the entire Technical Standard will be reprinted.

TSPP Updates

The DOE TSPPs will be updated to include these comments. If you have any additional comments or questions about the reaffirmation with errata process, please contact Rick Serbu, TSP Manager, **Richard.Serbu@eh.doe.gov**, 301-903-2856.

How the DOE TSP Supports . . . (Continued from page 2)

(2) Among the ***Guiding Principles***, there are several sets of standards and standards activities serving ISMS.

Competence Commensurate with Responsibilities: "Personnel shall possess the experience, knowledge, skills, and abilities (ksa's) that are necessary to discharge their responsibilities."

- DOE Technical Standards can be developed to contain specific references to required or recommended experience and "ksa's." For some critical safety standards, specific responsibilities are also assigned, although general assignment of working level responsibility is usually the case. Further, the Technical Qualification Program Technical Qualification Standards (loaded with ksa's!) are now being coordinated and maintained through the DOE TSP. Chapter IV of the DOE TSP Guide (DOE G 252.1-1) also outlines criteria for technical competence and quality of review for developing and using standards.

Identification of Safety Standards and Requirements: "Before work is performed, the associated hazards shall be evaluated and an agreed-upon set of safety standards and requirements shall be established which, if properly implemented, will provide adequate assurance that the public, the workers, and the environment are protected from adverse consequences."

- Many DOE Technical Standards were developed to specifically address a particular "hazard" (e.g., plutonium storage, electrical safety) and to establish common expectations and procedures for dealing with such DOE-unique hazards. Others supplement existing VCSs to address issues unique to DOE missions and functions (e.g., fire protection at processing facilities, nuclear criticality). Many of these standards find their way into "M&O" and "M&I" contracts, safety analyses, work smart standards sets, standards/requirements identification documents, and other safety basis documents. Still other DOE standards address the safety analysis process and technical matters that support such analysis.

Hazard Controls Tailored to Work Being Performed: "Administrative and engineering controls to prevent and mitigate hazards shall be tailored to the work being performed and associated hazards."

- Perhaps the major use of DOE Technical Standards is in the design and engineering areas to support DOE-unique technical and administrative issues. The presence of materials such as plutonium, enriched uranium, beryllium, mixed-wastes, explosives, and other exotic chemicals and chemical "soups" require intense technical analysis and integrated safety analysis for hazards such as fire, seismic events, natural phenomena (seismic, floods, lightning, wind), and material transportation and storage. These standards are developed and updated regularly as needed using a DOE-wide review that invokes openness, balance of interest, due process, and transparency. We tailor the hazard mitigation approaches to our unique hazards through the TSP standards development processes. DOE Technical Standards also address the unique hazards in construction and decommissioning of DOE facilities.

> **"Chapter IV of the DOE TSP Guide (DOE G 252.1-1) also outlines criteria for technical competence and quality of review for developing and using standards."**

Operations Authorization: "The conditions and requirements to be satisfied for operations to be initiated and conducted shall be clearly established and agreed-upon."

- Many DOE requirements are performance-oriented, and there may be several ways to safely and effectively meet them. DOE Technical Standards are used to provide acceptable means to meet such requirements. There are many DOE standards that can be used by contractors in areas such as fire protection, lightning safety, criticality, and worker safety.

(3) For the five ***Core Functions***, DOE Technical Standards are developed to directly support all levels of functions from DOE Corporate (e.g., Work Smart Standard Handbook) to work procedures at job sites (e.g., Hoisting and Rigging Standard).

Define the Scope of Work: "Missions are translated into work, expectations are set, tasks are identified and prioritized, and resources are allocated."

- Many DOE Standards and Handbooks provide information and processes for planning and managing work, conducting training, conducting work, developing designs, and setting specifications. Others establish criteria for nuclear facility categorization, conduct of operations, maintenance, and safety analysis. Some identify resources and planning necessary to conduct work (e.g., Hoisting and Rigging Standard).

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How the DOE TSP Supports . . . (Continued from page 3)

Analyze the Hazards: "Hazards associated with the work are identified, analyzed, and categorized."

- Many DOE Technical Standards address unique DOE hazards, for example areas such as radiological controls, nuclear safety, criticality safety, fire protection, and natural hazards mitigation. There are few VCSs that are available and applicable to DOE in these areas.

Develop and Implement Hazard Controls: "Applicable standards and requirements are identified and agreed-upon, controls to prevent/mitigate hazards are identified, the safety envelope is established, and controls are implemented."

- The most common use of DOE Technical Standards and VCSs is in developing work procedures that incorporate safety controls from accepted standards to address work hazards and operations, which include areas such as criticality, radiation protection, environmental monitoring, chemical safety, calibration, storage, fire protection, electrical safety, explosives, etc. Our safety experts work together to develop "agreed upon" DOE standards that reflect their shared knowledge and experience.

Perform Work within Controls: "Readiness is confirmed and work is performed safely."

- DOE Technical Standards are developed by DOE subject matter experts (SMEs) and subjected to DOE-wide review by other DOE SMEs. These standards incorporate DOE's best technical knowledge, risk management, experience, and lessons learned from conducting work across DOE and in related industries. Some standards (e.g., nuclear criticality, fire protection, explosive safety) specifically address readiness and safety performance in some detail.

Provide Feedback and Continuous Improvement: "Feedback information on the adequacy of controls is gathered, opportunities for improving the definition and planning of work are identified and implemented, line and independent oversight is conducted, and, if necessary, regulatory enforcement actions occur."

- To help ensure DOE Technical Standards reflect the latest technology and safety engineering concepts, they are subject to an automatic review every 5 years under TSP Procedures (TSPPs). They can also be routinely revised and updated when the need is identified – when technology changes, safety issues arise, or lessons learned are available. Suggestions for improvements from individuals are forwarded to the standard's Preparing Activity for consideration. Each standard goes through a full DOE and Contractor technical review, with a formal, documented comment resolution process. DOE TSPPs incorporate openness, balance of interest, due process, and transparency in the same manner as the American National Standards Institute (ANSI)-chartered standards development processes.

(4) ***Mechanisms*** – "Departmental expectations expressed through directives (policy, rules, orders, notices, standards, and guidance) and contract clauses."

Directives on identifying and analyzing hazards and performing safety analyses and Directives that establish processes to be used in setting safety standards:

- The DOE TSP is established under the Directives System Policies, Order, and Manual of the 251.1 series. The TSP is covered by DOE O 252.1 and DOE G 252.1-1. Both Federal and Contractor representatives participate in the working level management of the TSP and in establishing its standards development and maintenance processes and formal procedures. The TSP is set up specifically with infrastructure and information systems to promote the use of VCSs across DOE, to develop internal DOE standards when necessary, and to support DOE standards activities essential to DOE missions and functions. The TSP Standards and DOE Directives are cross-referenced to a large degree, and most documents reference their counterpart Directives and Standards.

(5) ***Responsibilities*** must be clearly defined in documents appropriate to the activity.

- Responsibilities for developing and maintaining DOE Technical Standards and participating with SDOs are formally established in the DOE TSP under Public Law 104-113, OMB Circular A-119, and in DOE Policies and Orders, including the Directives System 251.1 series. Specifically, the TSP Order and Guide (DOE O 252.1 and DOE G 252.1-1) and the TSPPs established under the DOE Standards Executive, DOE Technical Standards Manager, and DOE Technical Standards Managers' Committee (TSMC) direct the TSP activities. The functions of the DOE TSP are founded on best business practices agreed upon by both DOE Federal and Contractor representatives to the TSMC. DOE Technical Standards also frequently cite specific responsibilities where these are critical to technical success and safety.

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Welcome Aboard the TSMC!

The Technical Standards Managers (TSMs) are the backbone of the DOE Technical Standards Program!

These knowledgeable individuals serve as their organization's standards point of contact and contribute to the coordination of Department-wide TSP activities. A great deal of their work time is spent in assuring that standards activities take place in a manner that will promote safe, economical, and efficient operations locally and across the DOE complex.

With nearly 90 active and mobile people involved in TSM activities, it can be a daunting task just to keep up with the retirements and reassignments affecting the TSM roster. This "Welcome Aboard" feature is designed to introduce you to the new TSMs and help you keep abreast of the rapidly changing make-up of the Technical Standards Managers' Committee (TSMC).

The TSMC welcomes the following recently added members.

Adeliza Cordis (replaced Cheryl Keller)
U.S. Department of Energy
National Nuclear Security Administration
Oakland Operations Office
1301 Clay Street, MS 700N
Oakland, California 94612-5208
Phone: 510-637-1593
Adeliza.Cordis@oak.doe.gov

Sue Ekkebus (replaced Tom Thomas)
Oak Ridge Institute for Science and Education
P.O. Box 117
Oak Ridge, Tennessee 37831-0117
Phone: 865-576-3490
ekkebuss@orau.gov

Walter B. Scott
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Rebecca F. Smith (alternate)
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Germantown, Maryland 20874
Phone: 301-903-5791
Rebecca.F.Smith@hq.doe.gov

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(6) "***Implementation*** involves specific instances of work definition and planning, hazards identification and analysis, definition and implementation of hazard controls, performance of work, developing and implementing operating procedures, and monitoring and assessing performance for improvement."

- DOE Standards, Handbooks, and Specifications are developed under the DOE TSP to support implementation of DOE missions and functions. The major use of DOE standards is in the preparation of work procedures at the actual level where work is conducted. As such, the standards are designed to support the effectiveness and safety of work conducted by DOE elements, and in particular, to address hazards unique to DOE workers and the DOE work environments. Each standard helps establish criteria and set expectations for both technical and management processes – they help integrate safety with the work. Organizations choosing to use DOE standards to support implementation understand that the standard has been developed to support their needs, meet stringent DOE safety requirements, and generally need only be tailored to fit a specific site, facility, or work application. The availability of a DOE-wide standard can save both DOE and its contractors the need for redundant development of essential standards to support work where VCSs are not available, resulting in cost, effort, and time savings.

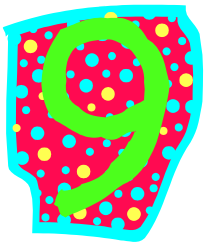
THE STANDARDS FORUM

Editor: Marsha McGinnis, **mcginnismp@ornl.gov**

Distribution: *The Standards Forum* is an electronic newsletter available from the TSP Web Site (**http://tis.eh.doe.gov/techstds/**). To update your mailing and e-mail addresses, please contact Amy Bush, ORNL, 865-576-2395, Fax 865-574-8481 **bushar@ornl.gov**.

Comments: If you have any questions or comments please contact Rick Serbu, EH-53, 301-903-2856, **Richard.Serbu@eh.doe.gov**. If you have any questions or comments on DOE Technical Standards projects, please call Don Williams, ORNL, 865-574-8710, **williamsdljr@ornl.gov**.

Publication: ORNL and DOE's ES&H Technical Information Services posts *The Standards Forum* quarterly for the DOE Technical Standards Program at **http://tis.eh.doe.gov/ techstds/**.



Nine Years and Counting!

This issue of *The Standards Forum* marks the completion of nine years of the publication's service to the DOE standards community.

We have seen several changes take place over the past nine years. We have gone from a print publication to an electronic publication; we have seen several changes to the newsletter, including new editorial staff members and various designs. Throughout the years, one thing has remained constant: the Technical Standards Program Office (TSPO) appreciates all who have written for, published, made suggestions, and otherwise contributed to *The Standards Forum* and its monthly companion, *Standards Action.* All of the writers and contributions in the production of the newsletters have enabled the TSPO to provide timely, accurate, and relevant information on the Technical Standards Program as well as events happening in other technical standards venues. Your contributions make these newsletters *your* publications!

The Standards Forum is, and will continue to be, a major publication for those involved in Federal standards activities. As a participant in Federal standards work, you are valued not only as a reader, but also as a potential contributor of articles on standards applications and approaches of interest to the DOE community. Your comments on the publication, including suggestions for improvements and topics to be covered, are also welcome. Please contact any member of the TSPO staff if you have any comments or recommendations on the newsletter.

We hope that as we begin the tenth year of *The Standards Forum*, the publication continues to lead you forward to success and satisfaction in your standards efforts. We appreciate your continued interest and involvement in the newsletters and the DOE Technical Standards Program.

If you have comments or questions about *The Standards Forum* or *Standards Actions*, please contact the newsletters' staff: Marsha McGinnis, 865-574-2506, **mcginnismp@ornl.gov**; or Amy Bush, 865-576-2395, **bushar@ornl.gov**.

"Standards Mean Business" Chosen as 2002 World Standards Day Theme

The U.S. Celebration of World Standards Day (WSD) Planning Committee has selected "Standards Mean Business" as the theme for World Standards Day 2002. A primary goal of World Standards Day is to raise awareness of the importance of global standardization to the world economy and to promote its role in helping meet the needs of business, industry, government, and consumers worldwide. This year's theme reflects the critical role that open, consensus-based industry standards play in facilitating local, national, and global trade and commerce.

A special exhibition, reception, and dinner will be held to celebrate World Standards Day on Wednesday, October 16, 2002, in the Washington, D.C. metropolitan area. The celebration will include presentation of the Ronald Brown Standards Leadership Award, which recognizes demonstrated leadership in promoting the important role of standardization in eliminating global barriers to trade. The award recipient is also invited to provide the evening's keynote address.

Also on the agenda will be a presentation of the first place award to the winner(s) of the World Standards Day Paper Contest. This annual competition, co-sponsored by the WSD Planning Committee and the Standards Engineering Society (SES), is designed to raise the awareness of the importance of standards. Based on this year's theme, "Standards Mean Business," papers will explore various perspectives on how standards or conformity assessment programs foster a healthier economy. The SES Executive Director must receive all submissions with an official entry form no later than midnight August 30, 2002. Entry forms are available on the SES Web site at **http://www.ses-standards.org**.

In addition to the World Standards Day Banquet on October 16, the American National Standards Institute (ANSI) will sponsor a series of events during the week of October 14-18, 2002 ("World Standards Week"). The ANSI Membership Councils will meet on Tuesday, October 15, 2002, followed by the ANSI Annual Awards Banquet and Ceremony. This banquet will serve as the opening event for the 2002 ANSI Annual Conference, "Breaking Down Borders – Business, Standards and Trade," which will be held on Wednesday, October 16 and Thursday, October 17, 2002. In addition, a Personnel Certification Symposium will take place on Friday, October 18, 2002.

For a complete listing of ANSI-sponsored 2002 World Standards Week events, visit the Events section of ANSI Online at **http://www.ansi.org/public/events/events_new.asp**.

NIST Plays Key Role in Improving Homeland Security Through Research and Standards Development Projects

The National Institute of Standards and Technology (NIST) is playing a key role in enhancing the nation's ability to prevent and respond to terrorism. Through more than 75 ongoing and newly initiated research and standards development projects, NIST is helping individuals in law enforcement, military, science, emergency services, information technology, airport and building security, and other areas protect the American public from terrorist threats.

NIST experts are serving on several national panels and special task forces as well as many state and local projects in an effort to improve Homeland Security. Some of the agencies with which NIST is collaborating include the American Society of Civil Engineers, American Institute of Steel Construction, American Concrete Institute, Society of Fire Protection Engineers, National Fire Protection Association, U.S. Army Corps of Engineers, Federal Emergency Management Agency, Department of Defense, General Services Administration, National Security Agency, U.S. Postal Service, Armed Forces Radiobiology Research Institute, Federal Aviation Administration, Federal Bureau of Prisons, National Institute of Justice, Defense Threat Reduction Agency, Federal Bureau of Investigation, American National Standards Institute, U.S. Customs Service, National Telecommunications and Information Administration, and Institute of Electrical and Electronic Engineers.

Some areas where NIST is making a contribution are outlined below.

Strengthening Structural and Fire Safety Standards

- Investigation of World Trade Center Buildings' Collapse
- On-site Survey of Pentagon Structural and Fire Damage
- World Trade Center Reconstruction and National Building Codes
- Fire, Smoke, and Simulations
- Hart Senate Office Building Air Flow Study
- Workshop on Structures and Extreme Fires
- Coordinated National Strategy for Protecting Critical Infrastructures
- Improved Materials for Structures

Cyber Security Standards and Technologies

- Development of the Advanced Encryption Standard (AES) for the protection of sensitive, non-classified electronic information against terrorists, spies, criminals, and hackers
- Assisting the private sector to incorporate NIST encryption algorithms into commercial products by testing and validating their correct implementation
- Development of other cryptographic standards for use in protecting our critical infrastructures, such as electrical grids and air traffic control systems
- Helping to secure electronic information through programs that develop national and international standards for information technology security
- Development of new security systems for wireless networks and new intrusion-detection technologies as well as other advanced information technologies for protecting the nation's infrastructure including the Internet

Enhanced Threat Detection and Protection

- Ensuring Proper Doses for Irradiation of Mail
- Weapon Detection Technologies and Standards
- Improved Standards, Protocols, and Test Methods for Detection of Chemical, Biological, Radiological, and Other Threats

Tools for Law Enforcement

- Standards for Biometrics
- Standards for Forensic DNA Typing
- Enhanced Surveillance Cameras
- Improved Standards for Protective Vests and Helmets
- Standards for Bullets and Casings

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Standards Actions

June 2002

Standards Actions

DOE Technical Standards Program Document Status

05-31-2002

Activity Summary

In Conversion—4

In Preparation—46

Out for Comment—13

Published this Month—2

5-year Review Status

Revision in Progress—10

Reaffirmation in Progress—13

Supersedure in Progress—0

Cancellation Pending—7

Cancellation in Progress—1

No Current Action—19

Inside this issue:

DOE Technical Standards Recently Sent for Coordination

The appropriate Technical Standards Managers (TSMs) will request specific reviewers to comment on this draft. The full text of the document is available on the TSP Web Site. If you wish to comment on this document, please notify your TSM.

The following draft DOE Technical Standards were recently distributed for coordination.

- *The Department of Energy Respiratory Acceptance Program for Supplied-Air Suits*, Project Number OCSH-0004; Joel Rabovsky and Dan Marsick, U.S. Department of Energy, 19901 Germantown Road, Germantown, Maryland 20874-1290; 301-903-2135 or 301-903-3954; Fax 301-903-7773; **Joel.Rabovsky@eh.doe.gov** or **Dan.Marsick@eh.doe.gov**. Comments are due July 30, 2002.
- *Occupational Safety Functional Area Qualification Standard*, Project Number TRNG-0026; Norm Schwartz, U.S. Department of Energy, 19901 Germantown Road, Germantown, Maryland 20874-1290; 301-903-2996; Fax 301-903-6172; **Norm.Schwartz@eh.doe.gov**. Comments are due July 31, 2002.

DOE Technical Standard Proposed for Reaffirmation

The following document is currently being reevaluated under the 5-year "Periodic Document Review" (Sunset Review) provision of the Technical Standards Program Procedures (TSPPs). The Preparing Activity (Office of Worker Protection Policy and Programs, EH-52) believes that the document is technically valid in its present version and recommends that it be reaffirmed.

The following DOE Technical Standard is proposed for reaffirmation:

- DOE-HDBK-1106-97, Change Notice 1, *Radiological Contamination Control Training for Laboratory Research*.

A review period ending July 26, 2002, has been set to provide the opportunity for interested persons to comment on this reaffirmation proposal. All comments and questions should be routed through your site Technical Standards Manager, who will relay your responses to the contact. If you have any questions or comments about the standard, please contact Dr. Judith Foulke at 301-903-5865, **Judy.Foulke@eh.doe.gov**.

Published DOE Technical Standards

The following DOE Technical Standard was recently printed and posted on the TSP Web Site:

- DOE-STD-1151-2002, *Facility Representative Functional Area Qualification Standard.*
- DOE STD-3009-94, Change Notice No. 2, *Preparation Guide for U.S. Department of Energy Nonreactor Nuclear Facility Documented Safety Analyses.*

DOE employees and DOE contractors may obtain copies from the ES&H Technical Information Services, U.S. Department of Energy; 1-800-473-4375, Fax 301-903-9823.

Subcontractors and the general public may obtain copies from the U.S. Department of Commerce, Technology Administration, National Technical Information Service, Springfield, Virginia 22161; 703-605-6000, Fax 703-605-6900.

Copies of DOE Technical Standards (i.e., DOE Standards, Specifications, Handbooks, and Technical Standards Lists) are also available on the TSP Web Site.

Non-Government Standards

American National Standards Institute

The American National Standards Institute (ANSI) publishes coordination activities of non-Government standards (NGS) biweekly in *ANSI Standards Action.* Recent electronic copies (no hardcopies are produced) are available on the ANSI Web site at **http://web.ansi.org/rooms/room_14/**. Electronic back copies are available to ANSI members only. For information on site membership, ask your local ANSI contact. For information on individual or group ANSI membership, contact Susan Bose at 212-642-4948 or **sbose@ansi.org**.

Hardcopy versions of published non-Government standards listed in this section may be obtained from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado, 80112, 800-854-7179, Fax 303-397-2740, **global@ihs.com**, **http://global.ihs.com**. Electronic delivery of selected documents is available through ANSI at **http://webstore.ansi.org**. Copies of the listed draft standards and the procedure for commenting on them may be obtained by contacting the standards developing organization.

The following listings are extracted from *ANSI Standards Action* and are representative of NGS development activities that may be relevant to DOE operations. Refer to *ANSI Standards Action* for a more extensive listing of changes and new publications, standards developing organizations, and additional information about submitting comments. Additional information on ANSI activities and available non-Government standards can be found on the ANSI Web site, **http://www.ansi.org**, or through the National Standards System Network, **http://www.nssn.org**.

The following American National Standards are currently in coordination (comment due dates follow each entry)**:**

- ASME QME-1-200x, *Qualification of Active Mechanical Equipment Used in Nuclear Power Plants* (revision of ANSI/ASME QME-1-2000) – July 9, 2002.
- ASTM Z7891Z-200x, *Practice for Examination of Seamless, Gas-filled, Steel Pressure Vessels Using Angle Beam Ultrasonics* (new standard) – June 17, 2002.
- ASTM Z8846Z-200x, *Practice for Examination of Welds Using the Alternating Current Field Measurement Technique* (new standard) – June 17, 2002.
- ASTM Z8968Z-200x, *Guide for Selection and Use of Mathematical Methods for Calculating Absorbed Dose in Radiation Processing Applications* (new standard) – June 17, 2002.
- ASTM D1068-200x, *Test Methods for Iron in Water* (revision of ANSI/ASTM D1068-1996) – June 17, 2002.
- ASTM D1129-200x, *Terminology Relating to Water* (revision of ANSI/ASTM D1129-2002) – June 17, 2002.
- ASTM D1890-200x, *Test Method for Beta Particle Radioactivity of Water* (revision of ANSI/ASTM D1890-1996) – June 17, 2002.
- ASTM D1943-200x, *Test Method for Alpha Particle Radioactivity of Water* (revision of ANSI/ASTM D1943-1996) – June 17, 2002.
- ASTM D3559-200x, *Test Method for Lead in Water* (revision of ANSI/ASTM D3559-1996) – June 17, 2002.
- ASTM D3645-200x, *Test Methods for Beryllium in Water* (revision of ANSI/ASTM D3645-1997) – June 17, 2002.
- ASTM D6239-200x, *Test Method for Uranium in Drinking Water by High-resolution Alpha-liquid-scintillation Spectrometry* (revision of ANSI/ASTM D6239-2001) – June 17, 2002.
- ASTM E748-200x, *Practices for Thermal Neutron Radiography of Materials* (revision of ANSI/ASTM E748-1996) – June 17, 2002.
- ASTM E1419-200x, *Test Method for Examination of Seamless, Gas-filled, Pressure Vessels Using Acoustic Emission* (revision of ANSI/ASTM E1419-2002) – June 17, 2002.
- ASTM E1817-200x, *Practice for Controlling Quality of Radiological Examination by Using Representative Quality Indicators (RQI's)* (revision of ANSI/ASTM E1817-1996) – June 17, 2002.
- ASTM E803-200x, *Method for Determining the L D Ratio of Neutron Radiography Beams* (reaffirmation of ANSI/ASTM E803-1996) – June 17, 2002.

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- ASTM E1496-200x, *Test Method for Neutron Radiographic Dimensional Measurements* (reaffirmation of ANSI/ASTM E1496-1997) – June 17, 2002.
- IEEE/ASTM SI 10-200x, *Use of the International System of Units (SI): The Modern Metric System* (revision of ANSI/IEEE/ASTM SI 10-1997) – July 8, 2002.
- ISA 67.06.01-200x, *Nuclear Safety-Related Instrument Channels in Nuclear Power Plants, Response Time Testing of* (new standard) – July 9, 2002.
- UL 698A-200x, *Standard for Safety for Industrial Control Panels Relating to Hazardous (Classified) Locations* (new standard) – June 9, 2002.
- Z117.1, *Safety Requirements for Confined Spaces* (revision of ANSI Z117.1-1995) – July 23, 2002.

The following American National Standards have been approved for publication (Publication is to take place within six months following the date shown. Publication status and ordering information may be obtained from ANSI's Customer Service at 212-642-4900.)**:**

- ANSI/ANS 2.23-2002, *Nuclear Plant Response to an Earthquake* (new standard) – May 6, 2002.
- ANSI/ASME OMb-S/G-2002, *Standards and Guides for Operation and Maintenance of Nuclear Power Plants* (supplement to ANSI/ASME OM-S/G-2000) – May 16, 2002.
- ANSI/ASTM D3614-1997 (R2002), *Guide for Laboratories Engaged in Sampling and Analysis of Atmospheres and Emissions* (reaffirmation of ANSI/ASTM D3614-1997) – May 10, 2002.
- ANSI/ASTM E1370-2001 (R2002), *Guide for Air Sampling Strategies for Worker and Workplace Protection* (reaffirmation of ANSI/ASTM E1370-2001) – May 10, 2002.
- ANSI/ASTM E1494-1992 (R2002), *Practice for Encapsulants for Spray-Or-Trowel-Applied Friable Asbestos-Containing Building Materials* (reaffirmation of ANSI/ASTM E1494-1992) – May 10, 2002.
- ANSI/IEEE C62.23-2001, *Application Guide for Surge Protection of Electric Generating Plants* (new standard) – May 2, 2002.
- ANSI/NSF 46-2002, Evaluation of Components and Devices Used in Wastewater Treatment Systems (i2r5) (revision of ANSI/NSF 46-2000) – May 2, 2002.

The following international standards are currently in coordination (comment due dates follow each entry)**:**

- 22H/22/FDIS, 62040-1-1, *Uninterruptible power systems (UPS) – Part 1-1: General and safety requirements for UPS used in operator access areas* – July 12, 2002.
- ISO/DIS 4037-4, *X and gamma reference radiation for calibrating dosemeters and doserate meters and for determining their response as a function of photon energy – Part 4: Calibration of area and personal dosemeters in low energy X reference radiation fields* – August 3, 2002.
- ISO/DIS 10006, *Quality management – Guidelines to quality in project management* – July 13, 2002.
- ISO/DIS 10007, *Quality management – Guidelines for configuration management* – July 13, 2002.
- ISO/DIS 14623, *Space systems – Pressure vessel structural design* – August 17, 2002.
- ISO/DIS 14850, *Nuclear energy – Waste-packages activity measurement – High-resolution gamma spectrometry in integral mode with open geometry* – August 17, 2002.
- ISO/IEC DIS 17011, *General requirements for bodies providing assessment and accreditation of conformity assessment bodies* – July 20, 2002.
- prEN 137 REVIEW, *Respiratory protective devices – Self-contained open-circuit compressed air breathing apparatus with full face mask – Requirements, testing, marking* – August 28, 2002.
- prEN 13177, *Chemicals used for treatment of water intended for human consumption – Methanol* – for information.
- prEN 13287, *Safety, protective and occupational footwear for professional use – Test method for the determination of slip resistance* – for information.
- prEN 13792, *Colour coding of taps and valves for use in laboratories* – for information.
- prEN 14432, *Tanks for the transport of dangerous goods – Tank equipment for the transport of liquid chemicals – Product discharge and air inlet valves* – September 4, 2002.
- prEN 14456, *Products used for treatment water intended for human consumption – Bone charcoal* – September 25, 2002.

The following newly published international standards are available:

- IEC 60313 Ed. 3.0 b:2002, *Coaxial connectors used in nuclear laboratory instrumentation*.
- IEC 61577-3 Ed. 1.0 b:2002, *Radiation protection instrumentation – Radon and radon decay product measuring instruments – Part 3: Specific require-*

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ments for radon decay product measuring instruments.

- IEC 60695-10-3 Ed. 1.0 b:2002, *Fire hazard testing – Part 10-3: Abnormal heat – Mould stress relief distortion test.*
- ISO/TS 14048:2002*, Environmental management – Life cycle assessment – Data documentation format.*

American National Standards Projects Initiated

The following is a list of proposed new American National Standards or revisions to existing American National Standards submitted to ANSI by accredited standards developers. DOE employees or contractors interested in participating in these activities should contact the appropriate standards developing organization. DOE-TSL-4 lists the DOE representatives on NGS committees. If no DOE representative is listed, contact the TSPO for information on participating in NGS activities.

Institute of Electrical and Electronics Engineers (IEEE)
Office: 445 Hoes Lane, P.O. Box 1331
Piscataway, New Jersey 08855-1331
Fax: 732-562-1571
Contact: Bob Pritchard, **r.pritchard@ieee.org**

- IEEE 577-200x, *Standard Requirements for Reliability Analysis in the Design and Operation of Safety Systems for Nuclear Facilities* (revision of ANSI/IEEE 577-1976 (R2002)).

Institute of Nuclear Material Management (INMM)
Office: 109 Caldwell Drive
Oak Ridge, Tennessee 37830
Fax: 865-576-6675
Contact: Joree O'Neal, **onealj@orau.gov**

- N14.34-200x, *Human Factors Affecting the Safety of Packaging/Transport of Radioactive Materials* (new standard).

American Society for Testing and Materials

Standards activities of the American Society for Testing and Materials (ASTM) are published monthly in ASTM *Standardization News.* Orders for subscriptions or single copies of ASTM *Standardization News* may be submitted to ASTM, Subscription Dept.-SN, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959. For information regarding ASTM membership, contact the Membership Services Department at 610-832-9691 (Fax 610-832-9667). ASTM publications may be ordered from the ASTM Customer Services Department at 610-832-9585 (Fax 610-832-9555). Comments on listed draft standards may be submitted by contacting the ASTM Standards Coordination Department at the above address. Questions may be addressed to the Technical Committee Operations Division at 610-832-9672 (Fax 610-832-9666). Additional information on ASTM activities is available on the ASTM Web site (**http://www.astm.org**). The following listings are extracted from ASTM *Standardization News* and are representative of NGS development activities that may be relevant to DOE operations.

The following ASTM standards are currently in coordination (the due date for all items is June 10, 2002):

- B 350/B 350M-01a, *Specification for Zirconium and Zirconium Alloy Ingots for Nuclear Application* – revised standard.
- B 351-01, *Specification for Hot-rolled and Cold-finished Zirconium and Zirconium Alloy Bars, Rod, and Wire for Nuclear* – revised standard.
- B 352-01, *Specification for Zirconium and Zirconium Alloy Sheet, Strip, and Plate for Nuclear Application* – revised standard.
- C 757-90(1996), *Specification for Nuclear-grade Plutonium Dioxide Powder, Sinterable* – reapproved standard.
- C 760-90(1996), *Test Methods for Chemical and Spectrochemical Analysis of Nuclear-grade Silver-indium-cadmium Alloys* – reapproved standard.
- C 787-96, *Specification for Uranium Hexafluoride for Enrichment* – revised standard.
- C 1205-97, *Test Method for the Radiochemical Determination of Americium-241 in Soil by Alpha Spectrometry* – reapproved standard.
- C 1285-97, (Includes Change to Title) *Test Methods for Determining Chemical Durability of Nuclear, Hazardous, and Mixed Waste Glasses: the Product Consistency Test Pct* – revised standard.
- C 1347-96a, *Practice for Preparation and Dissolution of Uranium Materials for Analysis* – revised standard.
- C 1441-99, *Test Method for the Analysis of Refrigerant 114, Plus Other Carbon-containing and Fluorine-containing Compounds in Uranium Hexafluoride Via Fourier-transform Infrared Ftir Spectroscopy* – revised standard.
- E 185-98, *Practice for Conducting Surveillance Tests for Light-water Cooled Nuclear Power Reactor Vessels, E 706* – revised standard.
- E 264-92(1996), *Test Method for Measuring Fast-neutron Reaction Rates by Radioactivation of Nickel* – revised standard.

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- E 265-98, *Test Method for Measuring Reaction Rates and Fast-neutron Fluences by Radioactivation of Sulfur-32* – reapproved standard.
- E 266-92(1996), *Test Method for Measuring Fast-neutron Reaction Rates by Radioactivation of Aluminum* – revised standard.
- E 385-90(1996), *Test Method for Oxygen Content Using a 14-mev Neutron Activation and Direct-counting Technique* – reapproved standard.
- E 393-96, *Test Method for Measuring Reaction Rates by Analysis of Barium-140 from Fission Dosimeters* – reapproved standard.
- E 496-96, *Test Method for Measuring Neutron Fluence Rate and Average Energy from 3h(d,n)4he Neutron Generators by Radioactivation Techniques* – revised standard.
- E 523-01, *Test Method for Measuring Fast-neutron Reaction Rates by Radioactivation of Copper* – revised standard.
- E 526-97, *Test Method for Measuring Fast-neutron Reaction Rates by Radioactivation of Titanium* – reapproved standard.
- E 636-95(2001), *Guide for Conducting Supplemental Surveillance Tests for Nuclear Power Reactor Vessels, E 706 Ih* – revised standard.
- E 704-96, *Test Method for Measuring Reaction Rates by Radioactivation of Uranium-238* – reapproved standard.
- E 705-96, *Test Method for Measuring Reaction Rates by Radioactivation of Neptunium-237* – reapproved standard.
- E 706-01, *Master Matrix for Light-water Reactor Pressure Vessel Surveillance Standards, E 706(0)* – revised standard.
- E 720-94, (Includes Change to Title) *Guide for Selection and Use of Neutron-activation Foils for Determining Neutron Spectra Employed in Radiation-hardness Testing of Electronics* – revised standard.
- E 900-87(2001), *Guide for Predicting Neutron Radiation Damage to Reactor Vessel Materials, E706 LIF* – revised standard.
- E 944-96, (Includes Change to Title) *Guide for Application of Neutron Spectrum Adjustment Methods in Reactor Surveillance, (iia)* – revised standard.
- E 1006-96, *Practice for Analysis and Interpretation of Physics Dosimetry Results for Test Reactors, E 706 (ii)* – revised standard.
- E 1035-85(1996), (Includes Change to Title) *Practice for Determining Radiation Exposures for Nuclear Reactor Vessel Support Structures* – revised standard.
- E 1167-87(1996)E01, *Guide for a Radiation Protection Program for Decommissioning Operations* – reapproved standard.
- E 1276-01, *Practice for Use of a Polymethylmethacrylate Dosimetry System* – revised standard.
- E 1278-88(1996)E01, *Guide for Radioactive Pathway Methodology for Release of Sites Following Decommissioning* – reapproved standard.
- E 1281-89(1996)E01, *Guide for Nuclear Facility Decommissioning Plans* – reapproved standard.
- E 1297-96, *Test Method for Measuring Fast-neutron Reaction Rates by Radioactivation of Niobium* – revised standard.
- E 1475-97, *Guide for Data Fields for Computerized Transfer of Digital Radiological Test Data* – revised standard.
- E 1894-97, *Guide for Selecting Dosimetry Systems for Application in Pulsed X-ray Sources* – reapproved standard.
- New Standard, *Guide for the Determination of Plutonium and Neptunium in Uranium Hexafluoride* – Ref. Z7234Z.
- New Standard, *Guide for Evaluation of Materials Used in Extended Service of Interim Spent Nuclear Fuel Dry Storage Systems* – Ref. Z8197Z.
- New Standard, *Practice for Competency Requirements of Reference Material Producers for Water Analysis* – Ref. Z8824Z.
- New Standard, *Guide for Transitioning Basic Sciences Into Commercial Technologies* – Ref. Z8898Z.
- New Standard, *Practice for Use of a Photofluorescent Film Dosimetry System* – Ref. Z8969Z.
- New Standard, *Practice for the Evaluation of Surveillance Capsules from Light-water Moderated Nuclear Power Reactor Vessels* – Ref. Z8996Z.
- New Standard, *Guide for General Design Considerations for Hot Cell Equipment* – Ref. Z9185Z.
- New Standard, *Test Method for Determination of Technetium-99 in Uranium Hexafluoride by Liquid Scintillatin Counting* – Ref. Z9250Z.
- New Standard, *Guide for Evaluating Disposal Options for Concrete from Nuclear Facility Decommissioning* – Ref. Z9273Z.

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The following newly published standards are available from ASTM:

- B 353-01e1 (Includes change to title), *Specification for Wrought Zirconium and Zirconium Alloy Seamless and Welded Tubes for Nuclear Service Except Nuclear Fuel Cladding* – edited standard.
- D 4082-02, *Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants* – revised standard.
- E 1609-01, *Guide for Development and Implementation of a Pollution Prevention Program* – revised standard.
- E 2058-02, *Test Methods for Measurement of Synthetic Polymer Material Flammability Using a Fire Propagation Apparatus FPA* – revised standard.
- E 2172-01, *Guide for Conducting Laboratory Soil Toxicity Tests with the Nematode* – revised standard.
- F 792-01 (Includes change to title), *Practice for Evaluating the Imaging Performance of Security X-ray Systems* – revised standard.
- F 1449-92, *Guide for Care and Maintenance of Flame, Thermal and Arc Resistant Clothing* – revised standard.

Comments, Questions, and Addresses

Comments: If you have any questions or comments, please contact Rick Serbu, EH-53, Manager, DOE Technical Standards Program Office (TSPO), 301-903-2856, Fax 301-903-6172, **Richard.Serbu@eh.doe.gov**.

Addresses: *Standards Actions* and *The Standards Forum* are electronic newsletters available on the TSP Web Site (**http://tis.eh.doe.gov/techstds/**). To update your mailing and e-mail addresses, please contact Amy Bush, ORNL, 865-576-2395, Fax 865-574-8481, **bushar@ornl.gov**.

Technical Standards Activities: The TSPO would like to be kept informed of the status of technical standards that are being prepared or coordinated for DOE. Please provide this information to the TSPO at 865-576-2395, **bushar@ornl.gov**.

DOE Topical Committees on Metrology and Accreditation Hold Annual Combined Meeting

By Mary Woodruff, Sandia National Laboratories, Secretariat for the Metrology and Accreditation Topical Committees

The annual combined meeting of the Department of Energy (DOE) Topical Committees (TCs) on Metrology and Accreditation and the DOE Primary Standards Laboratory Managers was held on March 12–13, 2002. New Brunswick National Laboratory (NBL) in Argonne, Illinois, hosted the meeting. Margaret Legel, the Quality Assurance Officer/Training Coordinator and Technical Standards Program Manager at NBL, served as the coordinator for the meeting.

Purpose

The DOE Metrology and Accreditation TCs were formed under the auspices of the DOE Technical Standards Program (DOE/TSP) to spearhead DOE metrology and accreditation efforts, working in close partnership with the National Institute of Standards & Technology (NIST). The DOE Primary Standards Laboratory Managers represent the metrology interests of the DOE nuclear weapons complex. Because of the close interrelationships among all three committees, their Steering Committees elected to defray costs by combining their annual meetings in 2000. Working in partnership with NIST, the Committees' goals are to enrich DOE's metrology and accreditation capabilities through increased contact and reduced cost.

Combining their resources and networks allows the committees to interact more actively and effectively with agencies throughout the Federal complex, including the Department of Defense and the National Aeronautics and Space Administration (NASA), as they address shared issues in metrology and accreditation areas.

Agenda Overview

Don Heirmann of the National Cooperation on Laboratory Accreditation (NACLA) provided an update on NACLA's activities since the 2001 combined meeting. Dr. Stephan Richter of NBL made a technical presentation entitled "Finnigan Triton Mass Spectrometer Qualifications for Measurements," and Dr. Steven Goldberg, also of NBL, presented a talk on "Measurement Controls for Quality Assurance: Application for Accreditation of Chemistry Laboratories."

During the meeting, attendees reported and discussed the current status, types of issues, and solutions to problems that they have encountered at their sites. By sharing information between sites and agencies, issues are addressed and solutions are found that provide consistent, appropriate metrology and accreditation practices. The Committees regard this type of interaction as one of the most valuable assets of the combined meetings. The Steering Committee tracks action items throughout the year to ensure that identified issues are actively addressed by the Committee members in an effort to produce reasonable solutions based on input from all members.

Issues

At this year's meeting, the primary issue discussed by the DOE sites was the implementation of the new International Organization for Standardization (ISO)/International Electrotechnical Commission (IEC) 17025 Standard, *General requirements for the competence of testing and calibration and testing laboratories*. In particular, issues related to uncertainty analysis, training requirements, and quality documentation requirements were discussed. The members generated several action items related to these areas that need to be addressed before the 2003 combined meeting. Discussions centered on the ISO 17025 requirements provided useful information to both implementers and assessors.

Attendees

Representatives from the following DOE sites were in attendance:

- Sandia National Laboratories (Albuquerque, New Mexico, and Livermore, California)
- Oak Ridge National Laboratory
- Y-12 National Security Complex
- New Brunswick Laboratory
- Pacific Northwest National Laboratory
- Pantex

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DOE Topical Committees . . . (Continued from page 14)

- Bechtel Nevada
- Westinghouse Savannah River Company
- Idaho National Engineering & Environmental Laboratory
- Honeywell Federal Manufacturing & Technologies (FM&T)
- Los Alamos National Laboratory

The following three Federal agencies were also represented at the meeting:

- NIST/National Voluntary Laboratory Accreditation Program
- NASA/Kennedy Space Center
- DOE National Nuclear Security Administration

Currently, NASA is scheduled to host the 2003 Combined Annual Meeting at the Kennedy Space Center in Florida. The dates for the meeting have not yet been set.

For more information about the Metrology TC and to read more detail about the combined meeting, go to **http://www.sandia.gov/metrology/mchome.html**. Questions can be directed to Richard Pettit, Sandia National Laboratories, 505-844-6242. To learn more about the Accreditation TC, visit their Web site at **http://www.sandia.gov/accreditation/**.

NIST Plays Key Role . . . (Continued from page 7)

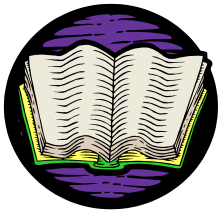
- Forensic Tools for Investigating Computer or Magnetic Data Evidence
- Crimes Involving Explosives or Gunpowder

Emergency Response

- Development of National Chemical and Biological Protective Equipment Standards for Protecting First Responders
- Standardization of Communications for First Responders
- Study of Building Occupants Evacuation for Improved Building Codes and Standards
- Search and Rescue Robots

To get more detail about these research and standards development projects, visit NIST's Web page at **http://www.nist.gov/public_affairs/factsheet/homeland.htm**.

ASME Issues Companion Guide To ASME Boiler and Pressure Vessel Code



ASME International (American Society of Mechanical Engineers) has issued a comprehensive new guide that addresses all sections of the ASME Boiler and Pressure Vessels and Piping Codes. *The Companion Guide to the ASME Boiler & Pressure Vessel Code: Criteria and Commentary on Select Aspects of the ASME Boiler, Pressure Vessel and Piping Codes*, is a 2-volume, 1,400 page guide that serves as a companion book to the latest editions to the ASME code, enabling users to understand the basic rationale of the code as deliberated and disseminated by ASME. The new guide was written by 36 experts in the code's preparation and use and was edited by K. R. Rao, Ph.D., P.E., and past-chair of the ASME Pressure Vessel & Piping Division's technical committee on codes and standards.

Volume 1 covers code sections I, II, III, IV and VI, as well as Code B31.1 and B31.3 for piping. Volume 2 includes sections V, VII, IX, X, XI, as well as special topics related to the code. The guide provides in-depth treatment of each of the code sections and covers areas including rules for certification and accreditation. It also provides numerous examples, explanatory text, graphics, and references and annotated bibliographical notes, which engineers can immediately reference to find acceptable criteria for material requirements.

The Companion Guide to the ASME Boiler & Pressure Vessel Code is published and distributed exclusively by ASME Press and is available as a 2-volume set or may be purchased separately. Visit the ASME/Codes & Standards Web site for more information: **http://www.asme.org/codes/**.

The World of Standards—

NEWS BRIEFS

Radionuclide and Radiation Protection Data Handbook Recently Published

The second edition of *Radionuclide and Radiation Protection Data Handbook* has recently been published. This reference handbook, also available on CD-ROM, was originally published in 1998. The 2nd edition contains updated internal and external dosimetry information and control criteria in the form of data sheets in an easy to use format for 144 of the most commonly used radionuclides in medicine, research and industry. It is designed as a ready reference source of information containing the most up to date isotopic and radiation protection data. Data for 36 additional radionuclides have been added since the 1st edition, together with radiation data for plane (infinite) sources and decay data for heavy radionuclides. The information includes half-life and specific activity; main emissions; International Atomic Energy Agency (IAEA) Basic Safety Standards exemption levels; external exposure data for a range of geometries; surface contamination data, detection, and limits; shielding information; International Commission on Radiological Protection (ICRP) dose per unit intake data by ingestion and inhalation; and more. The handbook is available from Nuclear Technology Publishing, P.O. Box 7, Ashford, Kent TN23 1YW, United Kingdom (phone +01233 641683; fax +01233 610021; e-mail **sales@ntp.org.uk**; Web site **http://www.ntp.org.uk/**).

ISO Publishes New Edition of Environmental Management Manual

The International Organization for Standardization (ISO) has published a new edition of its environmental management manual, *Environmental Management and ISO 14000*.

The first edition was published in 1999 as part of ISO's series of manuals for developing countries, but it proved to be equally as appreciated by readers in developed countries for its overview of the standards making up the ISO 14000 family. The new edition has been updated to take into account the latest developments in environmental management standardization and gives an account of the standards published to date and those in preparation by ISO technical committee (TC) 207, Environmental Management (ISO/TC 207).

Environmental Management and ISO 14000, written by experts of ISO/TC 207, describes the different groups of standards within the ISO 14000 family, the principles behind them, the issues they address and the solutions they propose. The ISO 14000 family currently comprises 20 standards. ISO 14001 contains the requirements for an environmental management system (EMS) and the criteria against which an EMS can be audited and certified; it is by far the most widely recognized standard developed by TC 207. EMS is considered to be of central importance to an organization, while the other standards are intended to support specific elements of the organization's environmental policy.

The 10 chapters that make up the manual cover the following subjects: ISO/TC 207 background; managing the environment – why ISO 14000?; environmental management systems – the ISO approach; environmental auditing; environmental assessment of sites and organizations; ISO 14020 series of standards for environmental labeling; environmental performance evaluation; life cycle assessment; environmental terms and definitions; possible use of ISO 14001 and ISO 14004 in the forestry sector; and design for the environment.

ISO Manual 10, *Environmental Management and ISO 14000* (ISBN 92-67-10341-5), is available from the ISO Central Secretariat (**sales@iso.org**), or from ISO's national member institutes (see **http://www.iso.org/iso/en/aboutiso/isomembers/index.html** for complete list of contacts).

ANSI *Standards Action* Initiates New Public Review Schedule

The editors of the American National Standards Institute's *Standards Action* have initiated a new compressed publication schedule effective March 11, 2002 (Volume 33, Issue #7). Under its new schedule, *Standards Action* will be published weekly rather than bi-weekly, and public review cycles for Call for Comment will begin every week instead of every two weeks. The implementation of extensive production and operational improvements have enabled shorter production times and decreased the lead-time necessary for public review announcements.

Bob Hager, ANSI director of publishing, said, "ANSI staff continues to work to improve this important document to ensure that it is timely, accurate and accessible to our members and the public who rely on it to participate effectively in the standards development process in this country and internationally. Our readers will notice other stylistic changes

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News Briefs (Continued from page 16)

that will improve Standards Action's usability and flexibility, while eliminating unnecessary features that contribute to longer production schedules."

Questions or comments regarding the new format and schedule may be directed to **psa@ansi.org**.

NFPA Partners with Jones and Bartlett to Publish Firefighter Training Materials

The National Fire Protection Association (NFPA) has formed a partnership with Jones and Bartlett Publishers, Inc. (J&B) to publish state-of-the-art training materials based on the 2002 edition of NFPA 1001, *Standard for Fire Fighter Professional Qualifications*.

Jones and Bartlett has extensive experience in publishing training materials for emergency medical services personnel. J&B is the ninth largest academic publisher in the United States and also has partnerships with the American Academy of Pediatrics, the American Heart Association, and the National Safety Council.

NFPA and J&B have established a 12-member national steering committee to guide the publisher in the development of comprehensive, innovative, and highly visual training materials for Fire Fighter I and Fire Fighter II. The training materials will include a textbook designed for use by students and instructors, other student materials, and a CD-ROM.

ASHRAE and NFPA to Partner on Energy Code

The National Fire Protection Association (NFPA) and the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) have announced an agreement to partner on an energy code. The code will be part of a comprehensive, consensus-based code set developed by NFPA and its partners.

The Energy Code will incorporate the 2001 editions of ASHRAE's energy standards, Standard 90.1 and Standard 90.2, and reflect any updates or addenda to those standards. It will apply to all buildings and will include the latest advances in heating, refrigeration, cooling, and lighting design, resulting in the potential for significant energy savings.

In addition to the Energy Code, the full set of codes being developed by NFPA and its other partners (International Association of Plumbing and Mechanical Officials, Western Fire Chiefs Association) will include: NFPA 70, National Electrical Code; NFPA 101, Life Safety Code; NFPA 5000, Building Code; and NFPA 1, Uniform Fire Code – a combination of the two most widely adopted fire codes in the United States. The codes set will also include the Uniform Plumbing Code and the Uniform Mechanical Code.

Interested in knowing more about these codes? Visit NFPA's Web site at **http://www.nfpa.org**.

ASHRAE Publishes Laboratory Design Guide

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) has published a design guide to address the heating, ventilating, and air-conditioning (HVAC) design issues unique to laboratories. The *ASHRAE Laboratory Design Guide* provides owners, designers, contractors, and operators with information on the requirements for achieving high quality laboratory facilities. The design guide can be used for the design, troubleshooting, and operation of laboratory facilities or as a comprehensive reference.

Demands on both industrial and university research facilities have increased with the growth in technology. This has resulted in increased concerns about worker safety and the cost of providing a safe environment, expanding the need for advanced technology in designing laboratories. Examples of HVAC design issues specific to laboratories include additional codes and standards, health risks, more complicated systems, and varying system conditions.

The *ASHRAE Laboratory Design Guide* progresses from project inception through operations and includes chapters on laboratory planning, the design process, exhaust hoods, primary air systems, process cooling, air treatment, exhaust stack design, energy recovery, controls, airflow patterns and air balance, operation and maintenance, the laboratory commissioning process, HVAC system economics, and microbiological and biomedical laboratories.

To order the guide, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, by mail at 1791 Tullie Circle NE, Atlanta, GA 30329, or visit the ASHRAE Online Bookstore at **http://www.ashrae.org**.

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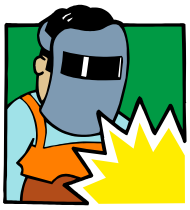


News Briefs (Continued from page 17)

New AWS Documents Outline Standard Welding Terms and Measurements

The American Welding Society (AWS) has recently published three new standards outlining the latest welding terms, measurements, and requirements. The American National Standards Institute (ANSI)-approved standards will inform the welding professional of the latest and most recommended documentation and procedures in the industry.

The *Standard Welding Terms and Definitions* can be used for legal and practical situations alike. The *Metric Practice Guide for the Welding Industry* interprets the International System of Units that will eventually replace the inch-pound system of units more widely used in the United States. The *Specification for the Qualification of Welding Engineers* will review the basic education and experience requirements for welders.

AWS documents are available by calling 800-854-7179, or visiting the AWS Web site at **http://www.aws.org**.

ASTM Seeks Input From Research Community on the Important Factors of Water Used in Laboratories

ASTM International Technical Committee on Water (TC D19) is reviewing Standard D 5196, *Standard Guide for Biomedical Grade Water*. The guide provides information on water used in laboratories conducting biological research. The committee would like to receive input from the research community and other users of this standard to determine the factors that should be considered in this guide. Standard D 5196 covers:

- Significance and use;
- Reagents;
- Sampling;
- Recommendations for purity; and
- Test methods.

TC D19 plans to add sections on preparation, storage, and distribution systems; it also welcomes input on these proposed sections as well as other topics that should be considered.

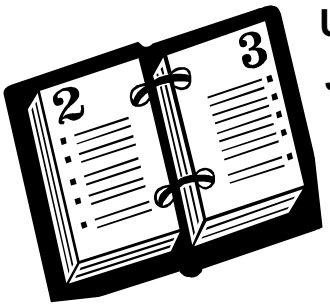
Please direct comments and information to Nathalie H. ("Dee") Perkins, The Bionetics Corporation, Newport News, Virginia (757-873-0900, ext. 237). Committee D19 meets June 2-6, 2002, at the Regal Maxwell House, Nashville, Tennessee, and January 19–23, 2003, at the Holiday Inn, Cocoa Beach, Florida. For meeting or membership details, contact Bruce Noe, manager ASTM Technical Committee operations (610-832-9719). To learn more about TC D19, go to **http://www.astm.org/COMMIT/D19.htm**.

ANSI and ICC Partner on Distribution of International Codes

The American National Standards Institute (ANSI) and the International Code Council® (ICC®) recently signed an agreement granting ANSI the rights to distribute ICC's International Codes™. This agreement is intended to make building safety codes more widely accessible to all facets of the building industry, both domestically and internationally.

Initially, ANSI will offer a total of fourteen ICC codes and standards in Portable Document Format (PDF) for users to purchase and download from the ANSI webstore at **http://webstore.ansi.org**. This number will increase with ICC's release of new codes and standards.

Included in the initial offering are such titles as the *2000 International Building Code®*, *2000 International Residential Code® for One- and Two-Family Dwellings*, *2000 International Plumbing Code®*, *2000 International Fire Code®*, and the new *2001 ICC Performance Code for Buildings and Facilities™*.



Upcoming Meetings and Conferences of Interest

June 5, 2002

DOE and DOE Contractors Industrial Hygiene Meeting

Bayside Pavilion Room San Diego Marriott Hotel and Marina—San Diego, California

Visit **http://www.eh.doe.gov/IHCC/conference.html-ssi** for more information.

June 9–12, 2002

Safety 2002: Advancing the EH&S Profession

Opryland Convention Center—Nashville, Tennessee

Sponsored by American Society of Safety Engineers.

For more information, visit **http://www.asse.org/annual_conf_main_text.html**.

June 9–13, 2002

2002 ASME Summer Annual Meeting

Marriott City Center—Minneapolis, Minnesota

For more information, visit **http://www.asme.org/conf/sam/**.

June 9–13, 2002

American Nuclear Society 2002 Annual Meeting: The Revival of the Nuclear Power Option

The Westin Diplomat Hotel—Hollywood, Florida

For more information, visit **http://www.ans.org/meetings/annual/**.

June 10–14, 2002

2002 DOE/Contractor Fire Protection Workshop

Pollard Auditorium—Oak Ridge, Tennessee

Visit **http://www.eh.doe.gov/fire/workshop2002/** for more information.

June 16–20, 2002

2002 Annual Meeting of the Health Physics Society and American Radiation Safety Conference and Exposition

Convention Center—Tampa, Florida

For more information, visit **http://www.hps.org/arsce/**.

June 22–26, 2002

ASHRAE 2002 Annual Meeting

Hilton Hawaiian Village—Honolulu, Hawaii

Topics include environmental health, commissioning, heat pumps, and refrigeration.

For more information, visit **http://www.ashrae.org/MEET/hawaii_meeting.htm**.

June 23–27, 2002

Institute of Nuclear Materials Management Annual Meeting

Renaissance Orlando—Orlando, Florida

Topics include more than 40 sessions and at least 300 papers on the operations, policies, and the latest research and development in nuclear materials management.

For more information, visit **http://www.inmm.org/topics/contents/meeting.htm.**

July 15–18, 2002

Seventh NRC/ASME Symposium on Valve and Pump Testing

Renaissance Washington D.C.—Washington, D.C.

Sponsored by the U.S. Nuclear Regulatory Commission and The American Society of Mechanical Engineers.

For more information, visit **http://www.asme.org/cns/departments/nuclear/7nrcasmesympo.html**.

August 4–8, 2002

2002 ASME Pressure Vessels and Piping Conference

Hyatt Regency—Vancouver, British Columbia

For more information, visit **http://www.asme.org/conf/pvp02/**.

August 4–8, 2002

Spectrum 2002: 9th Biennial International Conference on Nuclear and Hazardous Waste Management

Reno Hilton Hotel—Reno, Nevada

Theme: *Exploring Science-Based Solutions and Technologies*

For more information, visit **http://www.ans.org/spectrum/index.html**.

August 12–13, 2002

SES Annual Conference: The Changing Landscape of Standardization—Challenge and Response

Marriott City Center—Pittsburgh, Pennsylvania

For more information, visit **http://www.ses-standards.org**.

August 19–21, 2002

American Glovebox Society Conference

Rosen Plaza Hotel—Orlando, Florida

Theme: *Containment of Highly Potent Radiopharmaceutical, Biological and Chemical Hazards*

For more information, visit **http://www.gloveboxsociety.org/Conference/2002/Main.htm.**